EXO²

Stereo Monitoring System

USER MANUAL

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Stereo Monitoring System

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USER MANUAL • SAFETY INSTRUCTIONS

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

AVIS: RISQUE DE CHOC ELECTRIQUE
NE PAS OUVIR

WARNING: To reduce the risk of fire or electrical shock, do not expose this equipment to rain or moisture. Do not remove cover. No user serviceable parts inside. Refer servicing to qualified personnel.

1 READ INSTRUCTIONS - Read all safety and operating instructions before operating this product.

2. RETAIN INSTRUCTIONS - Retain these safety and operating instructions for future reference.

3. HEED WARNINGS - Follow all warnings on this product and in the operating instructions.

4. FOLLOW INSTRUCTIONS - Follow all operating and use instructions.

5. ATTACHMENTS - Do not use attachments not recommended by the product manufacturer as they may cause hazards.

6. WATER AND MOISTURE - Do not use this product near water - for example, near a bathtub, washbowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.

7. ACCESSORIES - Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with accessories recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions and should use a mounting accessory recommended by the manufacturer.

8. POWER SOURCE - This product should be operated only from the type of power source indicated on the marking label on the back of the product. If you are unsure of the type of power that is supplied to your home, consult your product dealer or local power company.

9. LIGHTNING- For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the product due to lightning and power-line surges.

10. OVERLOADING - Do not overload wall outlets or extension cords as this can result in a risk of fire or electric shock.

11. LIQUID ENTRY - Never spill any liquid of any kind on the product.

12. SERVICING - Do not attempt to service this product yourself. Opening or removing covers, including any over bottom or side speaker drivers, may expose you to dangerous voltage or other hazards. Refer all service to qualified service personnel.

13. DAMAGE REQUIRING SERVICE - Unplug this product from the wall outlet and refer servicing to qualified personnel under the following conditions:

a. When the power-supply cord or plug is damaged.
b. If liquid has been spilled, or objects have fallen into this product.
c. If the product does not operate normally by following the operating instructions. Adjust only controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
d. If the product has been dropped or damaged in any way.
e. When the product exhibits a distinct change in performance - this indicates a need for service.

14. REPLACEMENT PARTS - When replacement parts are required be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in risk of fire, electric shock, or other hazard.

15. SAFETY CHECK - Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

16. HEAT - This product should be situated away from heat sources such as radiators, heat registers, stoves, or other products that produce heat.

1. Welcome to Blue Sky

World-renowned for their accurate, full-range sound, Blue Sky speaker monitoring systems are used in critical listening applications by audio professionals in a wide variety of industry sectors. Emmy Award-winning sound editor Eric Lalicata, Grammy Award-winning engineer/remixer Roger Sanchez and legendary Talking Heads keyboard/guitarist Jerry Harrison all rely on Blue Sky speakers to check the accuracy of their work before it goes public. And it's the same story at film sound facility Skywalker Sound and broadcaster ESPN, where Blue Sky speakers once again provide an important link in the production chain.

Blue Sky's fresh approach to loudspeaker monitor design delivers the highest possible ratio of performance to cost, in turn providing the highest value to our customers.

Making the subwoofer (SUB) an integral part of the monitor system design enables the satellite speakers to be placed for the best imaging, and the SUB to be positioned for the best bass response. Relieving the satellite speakers of the requirement to reproduce the low frequencies means that uncompromised, sealed-box designs can combine with sophisticated bass management to provide a seamless transition between SATs and SUB.

It all adds up to accurate, full range sound.

www.abluesky.com

2. Welcome to eXo²

Your new eXo² system is more than a set of external speakers for your computer. It's a complete desktop audio reference monitoring system from Blue Sky – the people that make the monitors used in professional recording and production studios worldwide.

Your eXo² system consists of a subwoofer (which also contains the amplifiers and bass management circuitry), Left and Right satellite speakers, and a remote control.

In this box, you will find:

1 x eXo² subwoofer
2 x eXo² satellite speakers
1 x eXo² Remote (HUB)
1 x eXo² HUB cable
2 x Sets speaker wire
1 x Warranty card
1 x Owner's manual

3. Important Notes about eXo² and this manual

WARNING: Turn off power when connecting or disconnecting the remote / pre-amp from the back of the subwoofer (SUB).

EARPHONES / HEADPHONE LEVEL WARNING: Permanent hearing loss may occur if earphones or headphones are used at high volume.

THE OWNERS MANUAL
Please read this owner's manual carefully and contact Blue Sky International if you have any comments or questions. Contact information can be found on page 14 or you can visit:

www.abluesky.com

USER MANUAL • 4 • Expanded Setup Guide

1. If you haven't already done so, carefully remove all items from the packaging and confirm that everything that is listed on page 4 is included. [Welcome to eXo²].
2. eXo² is compatible with XLR, TRS, RCA and 3.5mm stereo plug input connections and can be used simultaneously. You will need a total of two (2) XLR, TRS or RCA inputs cables, or one 3.5mm stereo cable, for a stereo monitoring configuration (input cables *not supplied*). For more information on connecting your system, please see page 6 [System Signal Connection and Level Settings].
3. The first step in the installation process is to position the active subwoofer (SUB). Although you have great flexibility with regard to where the active SUB can be placed, a good starting point is centered between the left and right satellite speakers. This could be under a console / desk, behind the console / desk, etc. For an expanded SUB placement guide, please see page 10 [Subwoofer Placement Guide].
4. Once the SUB is in position, **confirm the power is off**, then connect the remote DIN plug into the SUB plug labeled "PREAMP". Next connect the two input cables from the left and right analog outputs from the mixing console, digital workstation or other source, to the left and right inputs on the eXo² remote control / pre-amp. For more information on connecting your system, please see page 6 [System Signal Connection and Level Settings].
5. Placing the eXo² SATs: The recommended position for the SATs is based on an ITU standard and sets the speakers at 60 degrees from the listener, forming an equilateral triangle (a triangle with equal sides) - See Figure 1. Fortunately, this setup eliminates most of the math and is easily simplified to the following guidelines: If you want to sit 1 meter (39.37 inches) from the speakers, place the speakers 1 meter apart. If you want to sit 2 ft from the speakers, place the speakers 2 ft apart. Etc. The monitors can be positioned on a console, desk, or mounted using wall mount brackets, etc. For more information see page 8 [eXo² SAT mounting and placement options].
6. Connect the speaker wire from the left high-level outputs on the back of the SUB, to the inputs on the left SAT. Now do the same for the right channel, connecting the right output to the right SAT. Please make sure that you connect positive to positive and negative to negative, so that both SATs are in-phase, and also confirm that the connections are not shorted between positive and negative terminals. Lastly, please plug in the power cord to the IEC connector on the back of the SUB (**International / non North American version only**). Prior to proceeding, confirm that the system is wired correctly, as shown on page 6 [System Signal Connection and Level Settings].
7. At this point the Blue Sky monitoring system is correctly configured, and ready for the final steps in the installation. Prior to plugging the system into the wall outlet, and powering up the system, do a final quick check of all connections and level settings and turn down the gain, to the minimum setting.

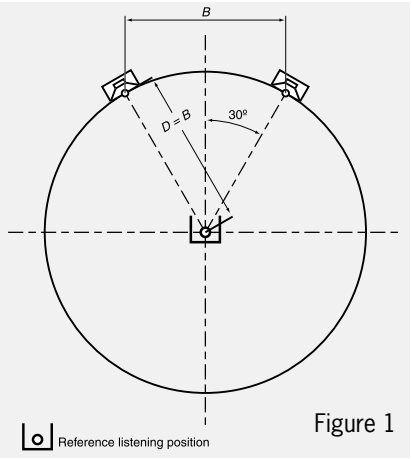


Figure 1

8. If everything is correct, plug the power cord into the wall outlet. **Do not turn on the power switches, yet!** Some mixers and out-board equipment such as D-to-A converters and equalizers generate loud rail-to-rail pops when they initially turn-on. Depending on the gain setting of the monitoring system, these pops could damage the monitors. **To avoid this, always turn on equipment in the following sequence: All sources and mixer first, and then the eXo² monitoring system, or set the GAIN to the minimum setting / fully counterclockwise, until everything is powered on.**
9. At this point the Blue Sky monitoring system is fully operational, and ready for use. Begin by playing familiar pieces of music which can assist you in fine-tuning the exact positioning of both the SATs and SUB, along with optimizing the system gain and level of the SUB (*a good starting point is the middle circle on the SUB knob*). It is important to remember that the positioning of the SUB will impact the its output level. You may find it necessary to adjust the level of the SUB depending on its location. This is OK, and is anticipated. For more information, see page 6 [System Signal Connection and Level Settings].
10. For a more exacting setup, using test signals and a SPL meter, please see Page 9 [Expanded Calibration Guide].
11. Just remember - Use your ears, they are the best audio tool you have and you will be amazed how accurate the setup can be if you use familiar audio material during the setup of the system.
12. Congratulations! You have now completed the set up of one of the world's finest studio monitoring systems. If you have any questions, please do not hesitate to contact us directly with your questions. (516) 249-1399 (9:00am to 5:30pm EST) or e-mail: **support@abluesky.com**

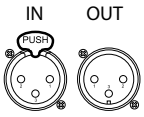
USER MANUAL • 5 • System Signal Connections and Level Settings

Below are some basic outlines of ways someone may interface eXo^2 with their audio system. These may or may not apply to your specific application, but they should be able to show the basic concept for most applications. **Please note that all inputs can be used simultaneously.**

CABLE WIRING SPECIFICATIONS

Most users of the eXo^2 system will be using ready made cables, however if you need to wire your own cables, follow the wiring specifications below.

	XLR	TRS	RCA
HOT (+)	Pin 2	Tip	Tip
COLD (–)	Pin 3	Ring	
SHIELD (GROUND)	Pin 1	Shield	Shield



XLR / TRS 'COMBO' INPUTS (ELECTRONICALLY BALANCED)

Figure 2: Shows the XLR inputs being fed from the output of a standard pro audio mixer. The eXo^2 XLR / TRS inputs can handle up to +30dBu of signal level at the input, when the input gain switch is set to the -12dB position, and are compatible with most, if not all professional gear.

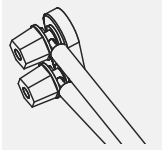
RCA AND 3.5mm STEREO INPUTS

Figure 2: The RCA and 3.5mm inputs on eXo^2 are compatible with a myriad of consumer and computer audio gear, such as mixers, CD players, Hi-Fi pre-amps, mp3 players etc.

3.5mm HEADPHONE / EARPHONE OUTPUT

Located on the front of the eXo^2 remote / preamp is a 3.5mm headphone jack. The impedance of the headphones should be 16 ohms or above. When headphones are connected to this jack, the output to the eXo^2 Stereo Monitoring System is muted. **Warning**: **Permanent hearing loss may occur if earphones or headphones are used at high volume.**

SPEAKER LEVEL OUTPUTS AND INPUTS



This drawing shows the proper way to insert bare wire into the binding posts which are on the subwoofer outputs and SAT inputs. When inserting bare wire, please make sure that there are no strands protruding out that may create a short-circuit. These binding posts are compatible with wire gauges up to approximately 10 gauge.

REMOTE / PREAMP AND SAT CONNECTIONS

Figure 3, shows the basic connections of the included system components. Please note: Turn off power when connecting or disconnecting the remote / pre-amp from the back of the subwoofer.

SYSTEM GAIN AND SUBWOOFER LEVEL

Shown in the drawing below are some basic guidelines for setting both the system gain and subwoofer level.

System Gain (GAIN): You will notice that the normal gain / level setting for headphones is lower, when compared to typical setting when using the eXo^2 stereo monitoring system. In order to avoid unpleasant and possibly dangerous headphone playback levels, always turn down the system gain when going to or from headphones. **Warning**: Permanent hearing loss may occur if earphones or headphones are used at high volume.

Subwoofer Level (SUB): There are several marks around the SUB level knob, which show some general guidelines for setting SUB level. Because all rooms / studios are unique, your actual SUB level setting may vary.

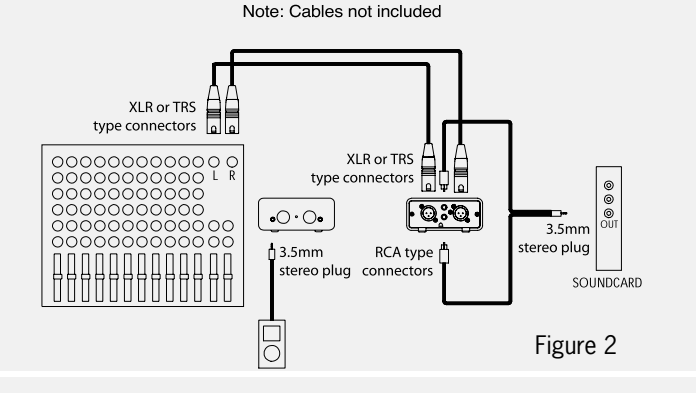


Figure 2

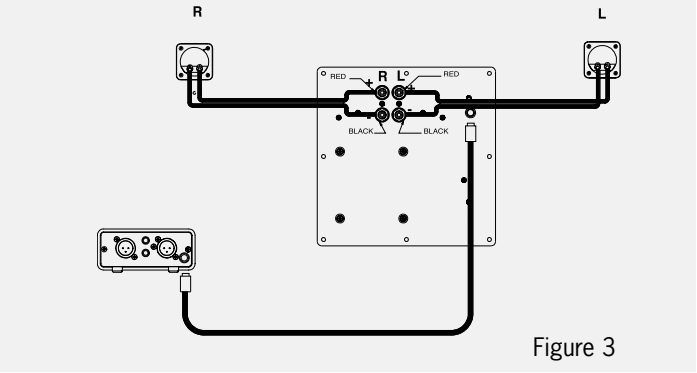
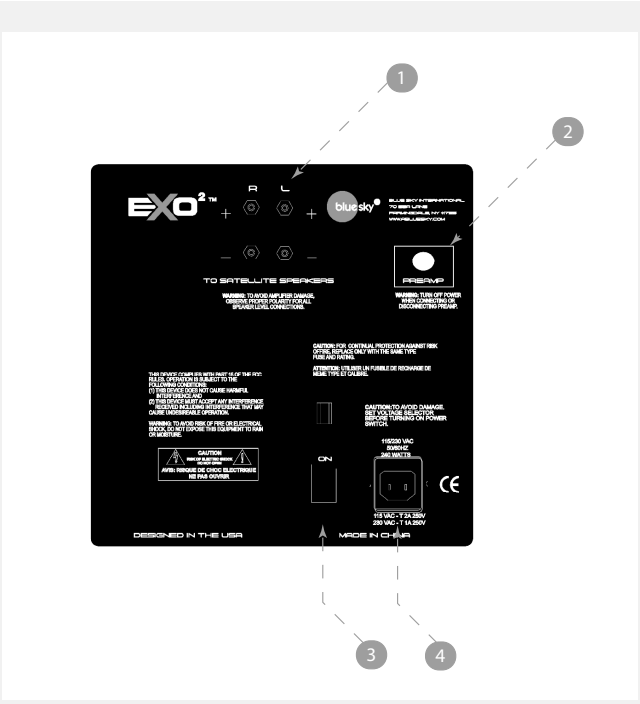
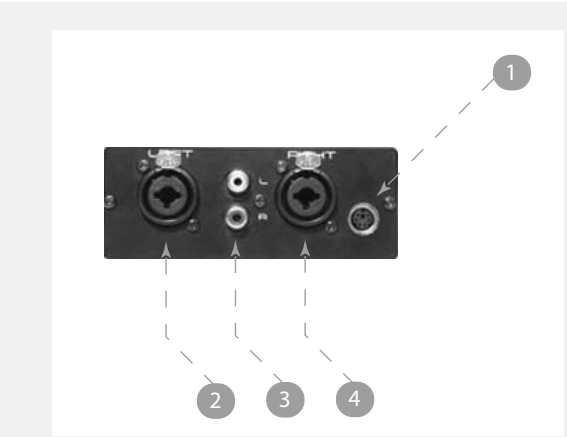


Figure 3

USER MANUAL • 6 • A tour of the eXo² amplifier and Remote



1. SPEAKER OUTPUTS - These are high quality binding posts that are compatible with both bare speaker wire and other speaker connectors (such as spades and signle banana plugs). Please always maintain proper phase and be careful to avoid short-circuits between output terminals.
2. REMOTE / PREAMP INPUT: Turn off power when connecting or disconnecting the remote / pre-amp from the back of the subwoofer.
3. POWER SWITCH - Controls the power to all the three amplifiers and all internal electronics.
5. IEC 320 Receptacle, with detachable power cord and integral fuse holder. Replace fuse with same rating and type listed on the back panel. 115V applications use a 5 x 20mm, T 2 Amp 250V (time delay). 230V applications use a 5 x 20mm, T 1 Amp 250V (time delay).

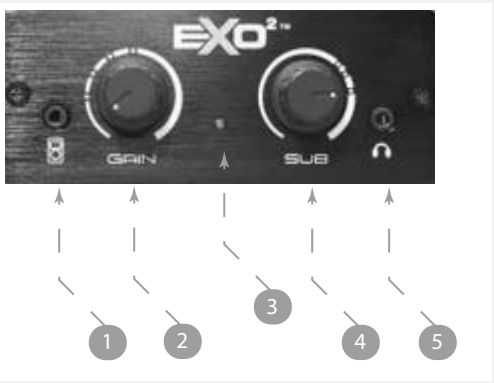


Please note that all inputs can be used simultaneously.

1. REMOTE / PREAMP CONNECTOR - This connector is used with the included multi pin cable, which connects the remote to the subwoofer. Turn off power when connecting or disconnecting the remote / pre-amp from the back of the subwoofer.
2. LEFT XLR / TRS 'COMBO' INPUT (ELECTRONICALLY BALANCED): This LEFT XLR / TRS input should be connected to the Left output of your console or digital workstation. This input is electronically balanced. Do not connect more than one source to this input. Refer to page 6 for more information [System Signal Connection and Level Setting]
3. LEFT and RIGHT RCA IN - These are unbalanced RCA type inputs that are designed to work with -10 dBV sources, such as consumer sound cards, CD players, some mixers, etc. Refer to page 6 for more information [System Signal Connection and Level Setting].
4. RIGHT XLR / TRS 'COMBO' INPUT (ELECTRONICALLY BALANCED): This RIGHT XLR / TRS input should be connected to the Right output of your console or digital workstation. This input is electronically balanced. Do not connect more than one source to this input. Refer to page 6 for more information [System Signal Connection and Level Setting]

continued on page 8

6. Tour of the eXo² Remote (continued)



Please note that all inputs can be used simultaneously.

1. 3.5mm STEREO INPUT - This unbalanced input is designed to work with sources such as consumer sound cards, CD players, mp3 players, etc. It has 6dB more gain when compared to the RCA inputs. Refer to page 6 for more information [System Signal Connection and Level Setting].
2. 2.1 SYSTEM GAIN (GAIN) - This knob controls the overall system gain. The subwoofer gain knob [item 4 detailed below], tracks this setting.
3. POWER INDICATOR LED - This LED, when lit, indicates that the unit remote is connected to a powered eXo² Subwoofer.
4. SUBWOOFER GAIN (SUB) - This knob controls the relative SUB level as compared to the overall system output. This setting tracks the overall system level. For more information on setting SUB level, please refer to page 5 [Quick Setup] and page 9 [Expanded Calibration Guide].
5. 3.5mm STEREO HEADPHONE / EARPHONE OUTPUT - This output is designed to connect to headphones or earphones. When connected, the output of the eXo² Stereo Monitoring System is muted. Please turn down the system GAIN (item 2 in this list), when switching between headphones / earphones and the eXo² Stereo Monitoring System.

Warning: Permanent hearing loss may occur if earphones or headphones are used at high volume.

7. eXo² Mounting and Placement Options

Wall Mount Options (not shown)

The single 1/4" X 20 insert on the back of the eXo² SAT is compatible with BT Technologies BT-33 Brackets (www.btech-usa.com) and is also compatible with OmniMount's type 10 Series of wall / ceiling brackets (www.omnimount.com). For more details on this mounting insert please see page 12 [Satellite Cabinet Dimensions].

Please Note: Mounting a studio monitor, such as the eXo² SAT, should be done by qualified persons in accordance with all applicable local safety and construction standards. Also be certain to follow the instructions provided by the manufacturer of the mounting brackets.

Instructions for electroacoustic calibration of a 2.1 audio system using a SPL meter and Blue Sky's test files.

Before starting this procedure you will need to download BlueSkyTestFiles.zip (an 15 MB zip file) by going to:
www.abluesky.com

Once downloaded, either burn the test files to a CD or import them into your DAW and follow the instructions below.

ADDITIONAL REQUIRED ITEMS

1. 2.1 Monitoring System
2. SPL Meter - such as those sold by (RadioShack)

BlueSkyTestFiles.zip Includes 4 files:

- 1000Hz SINEWAVE -20dBFS.wav – a 1kHz file recorded at -20dBFS for electrical calibration
- 40-80Hz PINK NOISE -20dBFS.wav – a 40Hz to 80Hz bandwidth limited pink-noise file recorded at -20dBFS
- 500-2.5kHz PINK NOISE -20dBFS.wav – a 500Hz to 2.5Hz bandwidth limited pink-noise file recorded at 20dBFS
- Pink Noise full bw -20dBFS.wav – a full-bandwidth pink-noise file recorded at - 20dBFS

These test files are all mono files. Please make sure you hard assign them to the left and then the right, not both channels at the same time. If you are using a CD player use only one channel of the CD player.

THEORY

The purpose of calibration is to adjust the overall electroacoustics system gain so that 0dBVU of electrical signal level equals a certain acoustic level at the listening position. Since most recording media is now digital, the reference electrical signal level is usually –20dBFS with 20dB of headroom. The reference SPL level however can vary based on the delivery media and speaker type.

Please note that the bandwidth limited signals that have been provided, limit many of the room interaction affects often associated with measuring SPL and broadband pink noise.

All test signals are recorded at –20dBFS including the 1 kHz sine wave tone. The sine wave tone is used to set the electrical output level throughout the signal path, right up to the point you get to the speakers, while the various pink noise signals are used for acoustic measurements and calibration.

The following procedure assumes you are calibrating the system to 85dBc SPL.

Step 1 TURN OFF THE MONITORING SYSTEM (until step 4)

Step 2 Remove all eq and dynamics from the signal path and set all controls to zero / unity gain. Play the 1kHz Sine Wave, hard assign it to the left channel only, and adjust the output fader so the output meter reads -20dBFS. If you are using an analog console, set the output level to 0 VU. Then hard pan the signal to the right channel output and repeat for the right channel. Once calibrated do not move the output faders.

Step 3 Mute everything and make sure the 1kHz tone is OFF .

Step 4 Now that the system has been electrically calibrated turn ON the eXo^2 Stereo Monitoring System.

Step 5 Assign the 500-2.5kHz pink noise signal to the left channel or right channel only. Make sure there is nothing coming from the right channel (or any other channels). Because this signal is bandwidth limited, you don't have to worry about turning the subwoofer (SUB) off. There are two methods of setting the levels.

A. If you have a master monitor level control, you can set the sat gain control at reference and then adjust the eXo^2 GAIN control for 85 dBc. Then mark the monitor level as your reference position.

B. The other method is to set eXo^2 master GAIN control to the position you want as a reference level and then use your own volume controls to set 85 dBc. If you use this method you should mark the knob position with a grease pencil so you can always go back to reference level if the knob gets moved.

For either method:
SPL should be measured at the mix position, with the SPL meter at arms length, with the microphone at seated ear height, angled at approximately 45 degrees, and pointed at the center point between the left and right speakers. Once the left channel is set to 85dBc, repeat this step for the right channel

Step 6 Feed 40-80Hz pink noise signal to the left channel only. Adjust the subwoofer level control (SUB) until the subwoofer measures 85dBc (slow) at the mix position. The meter will bounce around a little, so you will need to do a mental average (*I tend to filter out the peaks in my mind, so I don't set the SUB too hot*). The right channel should measure about the same and no additional adjustments need to be made.

Step 7 You can play the full-bandwidth pink noise, assigning it to the left and then the right channel (not at the same time). You should measure about 85dBc. It may be a little higher, because below 30Hz the room may have a little extra gain. No adjustments should be made with Full Bandwidth pink noise, unless you have an RTA (real time analyzer).

Step 8 You are finished and the calibration process has been completed – enjoy!

USER MANUAL • 9 • Subwoofer Placement Guide

The low frequency response and efficiency of a subwoofer are heavily influenced by the acoustics of the playback environment. More specifically, the response is influenced by the room's dimensional ratios, types of construction and location of the subwoofer within that environment. You can significantly improve the subwoofer's in-room response and efficiency by experimenting with various room placements until you find an optimum location.

When placing the subwoofer there are several general guidelines that should be kept in mind. These include:

- Every acoustic space is unique and experimentation is an important key in finding the best possible location in your particular environment.
- A subwoofer becomes more acoustically efficient (has greater output) as you move it closer to a room surface (e.g. wall or floor).
- A subwoofer will give maximum output and maximum acoustic excitement when it is located in a corner.
- Under certain acoustic conditions corner locations are optimum; in others they can excite multiple "room modes", producing "muddy" or "boomy" sound.

The following methods have been found to work successfully under most conditions:

The first method described below doesn't require any special test equipment. It does require a pair of good ears and familiar broad-spectrum music material – recordings with lots of energy across a wide frequency range (from low to high). The recordings should be highly dynamic and be of relatively high quality.

The second subwoofer placement method requires using a real time analyzer – such as those made by Gold Line™ or The Audio Toolbox(TM) by TerraSonde(TM). Although many home audio enthusiasts may not have access to this equipment, if you are having a sound system or home theatre system professionally installed, this information may be useful to the installer.

Method 1

Place the subwoofer at the main listening position and connect and make sure it is properly connected to your receiver. Turn on the CD or music source and make sure that the level of the subwoofer has been raised high enough so that low frequencies are not masked by the background noise in the room. Once you have roughly balanced the level, between the subwoofer and main speakers, move around the room and pay careful attention to where the spectral response is smoothest and has the greatest low frequency extension, pay special attention to the corners and along the walls. Also, make sure to pay attention to where the system has its' greatest impact and definition. You are not just listening for the most boom, but rather where the bass is most accurate and natural sounding. Remember, because the subwoofer is basically omni-directional, the best spot for the subwoofer can be next to, or even behind, the main monitoring area.

After finding the spot where the subwoofer has the best response in the room, place the subwoofer in that location. Now, listen from the main position and confirm that the subwoofers response is similar to when the positions were reversed. If it is, then leave the subwoofer in that location. If not, continue to experiment with the subwoofer location until the most accurate and best response has been achieved.

Method 2

Subwoofer placement using a real time analyzer – Such as those made by Gold Line™ or The Audio Toolbox™ by TerraSonde™.

Place the subwoofer at the main listening position and connect the subwoofer to your pink noise generator. Turn on your pink noise generator and make sure that the level of the subwoofer has been raised high enough so that low frequencies are not masked by the background noise in the room. Now set the analyzer to 1/12 octave resolution (or whichever setting provides the highest resolution on your particular analyzer), real time mode and begin to take measurements around the room. If the analyzer you are using has the ability to do real time averaging, then use this function to better analyze the spectral response.

As you walk around the room, be sure to pay careful attention to where the spectral response is smoothest and has the greatest low frequency extension, pay special attention to the corners and along the walls. Remember, because the subwoofer is basically omni-directional, the best spot for the subwoofer can be next to, or even behind, the main monitoring area.

After analysing the data and finding the spot where the subwoofer has the best response in the room, place the subwoofer in that location. Now, take some additional measurements from the listening position and confirm that the subwoofers response is similar to when the positions were reversed. If it is, then leave the subwoofer in that location. If not, continue to experiment with the subwoofer location until the smoothest and best response has been achieved.

Additional Notes

It has been found that a subwoofers' in-room response can sometimes be improved by facing the drivers toward a wall. Again, experimentation is the key to finding the best possible location.

Properly designed subwoofers generate tremendous energy, so they may vibrate objects close to them. If you hear buzzing or vibrating objects, make sure to try and dampen those objects. Rattling, buzzing and other sympathetic resonances can make the subwoofer localizable and therefore should be avoided. Using a sine wave generator can be helpful in locating these acoustic anomalies.

USER MANUAL • 10 • Technical Information

This next section outlines the components, specifications and performance data that make this product such a uniquely high value.

In order to continually improve all of its products, Blue Sky reserves the right to change these specifications without notice.

eXo² Specifications

General Specifications

Input Impedance
XLR / TRS Combo
60k Ohms balanced Input gain = +0dBu

RCA input:
30k Ohms unbalanced

3.5mm (front panel input)
15k Ohms unbalanced

Common Mode Rejection Ratio
40 dB typical @ 60Hz (balanced inputs only)

Maximum Input Level
+18 dBu XLR / TRS/ RCA Input gain = +0dBu
+12 dBu 3.5mm / Mini-Jack (front panel input)

Voltage Sensitivity
200mV = 90 dB SPL @ 1m XLR/TRS (input gain = 0dBu)
200mV = 90 dB SPL @ 1m RCA
200mV = 96 dB SPL @ 1m 3.5mm (front panel input)
Note: 200mV = -11.75 dBu = -14 dBV

Amplifier power output Note: *All power output measurements made with the speaker protection circuits disabled. Long term power output is limited by the speaker protection circuitry.*

Short term power output 1 channel driven:
42 watts x 1 @ <.1% THD into 4 ohms @ 1 kHz

Short term power output 2 channels driven :
35 watts x 2 @ <.1% THD into 4 ohms @ 1 kHz

Subwoofer power output:
110 watts x 1 @ <1% THD into 4 ohms @ 50 HZ

3.5mm headphone output:
4 mW x 2 @ <.2% THD into 16 ohms @ 1 kHz

Mains voltages:
115V / 60Hz (North American Version)
230V / 50Hz (Export)
Voltage is set at the factory
Maximum power consumption:
240 watts
Fuse Type and Rating:
115V = 5 x 20mm, T 2 Amp 250V (Time Delay).
230V = 5 x 20mm, T 1 Amp 250V (Time Delay)

Satellite

• The single 1/4" X 20 insert on the back of the eXo² SAT is compatible with BT Technologies BT-33 Brackets (www.btech-usa.com) and is also compatible with OmniMount's type 10 Series of wall / ceiling brackets (www.omnimount.com). For more details on this mounting insert please see page 12 [Satellite Cabinet Dimensions]

- Dimensions:
  7.2" H X 4.8" D x 5" W
  18.1 cm X 12.1 cm x 12.7 cm
- Weight 3 lbs. / 1.36 kg
- 3" cast frame woofer, Neodymium motor structure
- 1" fabric Neodymium tweeter
- Fully Video Shielded
- Satellite Low frequency crossover 140 Hz
- Tweeter Crossover Frequency 2200 Hz
- Nominal SAT impedance 4 Ohms

The following specifications are measured using the eXo² Amplifier

- Frequency Response Satellite
  +/- 2.0 dB 200 Hz to 10 kHz
  +/- 3.0 dB 140 Hz to 20 kHz

8" Sealed Box Subwoofer

- 8" woofer, vented motor, paper cone with foam surround
- Fully video shielded,
- Isolation feet are included
- Dimensions:
  (subwoofer only)
  9.4" H x 9" W x 10.2" D
  30.5 cm x 30.5 cm x 33 cm

- Weight 20 lbs. / 9.07kg
- Frequency Response Subwoofer
  Anechoic Response:
  35 to 140 Hz +/-6dB
  Typical In-Room Response:
  20 to 200 Hz (1500 Cubic Feet)

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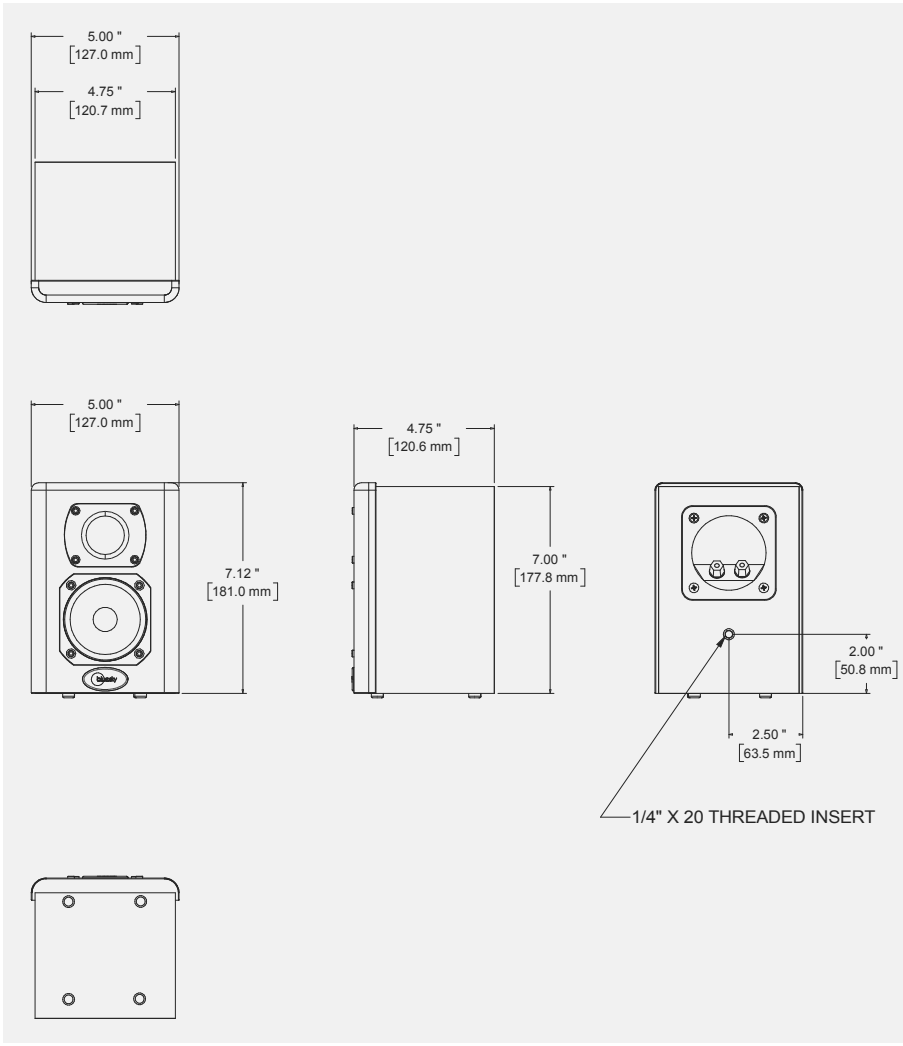

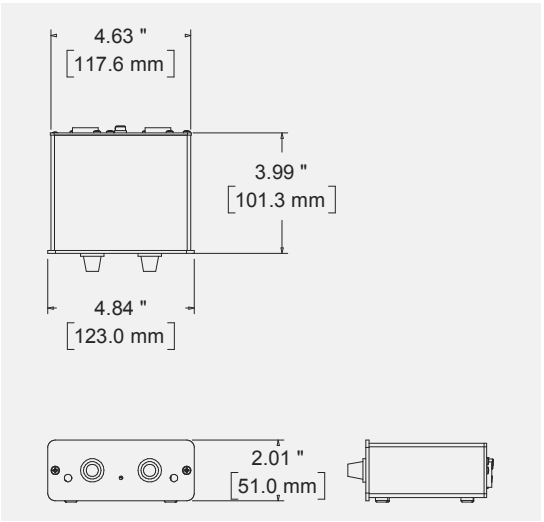

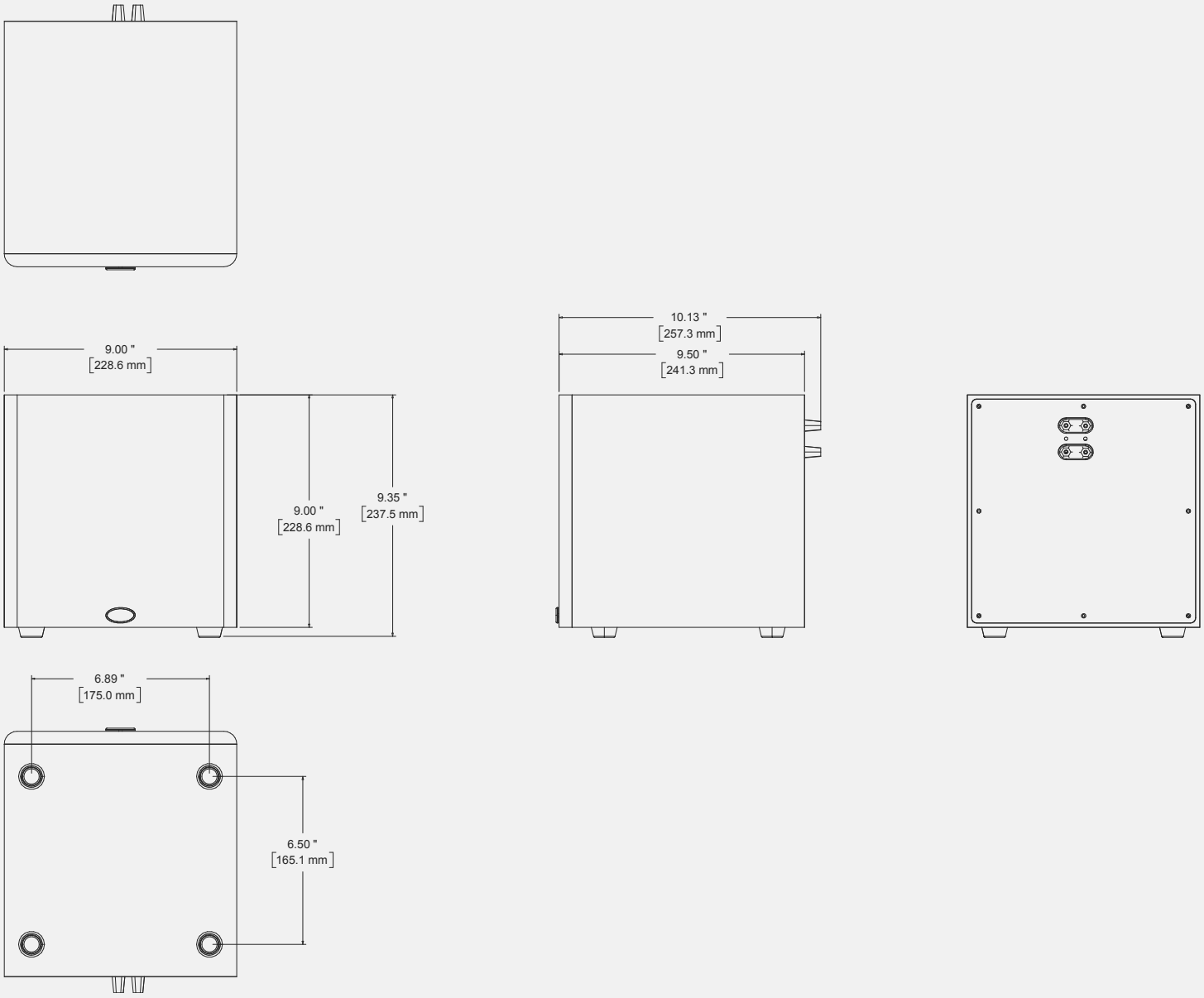
9.00 "
[228.6 mm]
9.00 "
[228.6 mm]
9.35 "
[237.5 mm]
10.13 "
[257.3 mm]
9.50 "
[241.3 mm]
6.89 "
[175.0 mm]
6.50 "
[165.1 mm]

13. Factory Service Instructions

Service for the U.S. versions of Blue Sky products is available only from our authorized distributor, Group One Ltd., located in Farmingdale, New York. (Service for Blue Sky products outside the United States can be obtained through local dealers or distributors.) If your monitor needs service, follow these instructions:

1. Review the manual and ensure that you have followed all setup and operating instructions.
2. Call (516) 249-1399 9:00am to 5:30pm EST and ask for Customer Service. Explain the problem and request an RA (Return Authorization) number. It is important to have your product serial number available when you call. You must have an RA number before you can obtain service.
3. Pack the product in its original packing material and box. Please do not return the manual or power cord, if detachable (international / non North American version only). If you don't have the original packing material and/or box, please let Customer Service know when you call for the RA number. Blue Sky is not responsible for any damage that occurs due to non-factory packaging.
4. Include a legible note stating your name, shipping address (no P.O. boxes), daytime phone number, RA number, and a detailed description of the problem, including how it can be duplicated
5. Write the RA number on the top of the carton.
6. Ship the product to the address below. We recommend United Parcel Service (UPS). Please insure the product regardless of shipping method.

   Blue Sky International
   ATTN: SERVICE DEPT / RA#
   70 Sea Lane
   Farmingdale, NY 11735
   USA

7. Turnaround time is three to five business days depending on the problem. When calling for RA numbers, please ask Customer Service what the turnaround time is. The serviced product will be sent back to you via the same shipping method as received (i.e. if you ship your monitor UPS Ground it will be returned UPS Ground, UPS Red will be returned UPS Red etc...). This only applies to products serviced under the warranty.

14. General Contact Details

For sales and other enquiries, please contact Blue Sky at:

Blue Sky International
70 Sea Lane
Farmingdale, NY 11735
USA

tel: 516 249 1399
fax: 516 249 8870
email: **support@abluesky.com**

To discover the very latest information check out our website at:

www.abluesky.com

15. Recycling Information

Blue Sky products are designed to last many years. However, if it turns out that your Blue Sky product is damaged beyond repair, please take care that it is properly recycled in an authorized recycling facility and in accordance with all local environmental legislation.

Dismantling of Blue sky products should be done by qualified individuals only. End users should not attempt to dismantle any Blue Sky product!

Note the following aspects about recycling some of the main components of our eXo² Stereo Monitoring System:

Packing material: Cardboard and plastic can be recycled or burned in a waste disposal oven.

Studio Monitor / Speaker Drivers: These items contain several different materials so they should be dismantled for recycling.

The eXo² SAT baffle and Remote Baffle: These items are made of plastic which is well suited to recycling.

Amplifier Plate and Remote Case: These items made of aluminium and can be recycled when all components have been removed.

Amplifier and Other Electronic Components: These items can be recycled according to your local electronic equipment recycling standards. Do not burn any of the amplifier components.

Cables and Connectors: These items can be reused in a suitable application or recycled according to your local electronic equipment recycling standards.

Cabinets: MDF cabinets can be burned in a controlled high temperature waste disposal oven.

16. FCC Part 15 Compliance

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

This device may not cause harmful interference, and

This device must accept any interference received, including interference that may cause undesirable operation.

Note: This equipment complies with the limits of part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning equipment on and off, the user is encouraged to try to correct the interference by one or more of the following measures:

Reoriented or relocate to receiving antenna

Increase the separation between equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Modifications not expressly approved by the manufacturer could void the users authority to operate equipment under FCC rules.

Blue Sky International
70 Sea Lane, Farmingdale, New York, 11735 USA • T: +1 516 249 1399 • F +1 516 249 8870
www.abluesky.com